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RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)								DATE February 2000	
BUDGET ACTIVITY 04 - Demonstration and Validation				PE NUMBER AND TITLE 0603441F Space Based IR Arch (Dem Val)(Space)				PROJECT 640007	
COST (\$ in Thousands)	FY 1999 Actual	FY 2000 Estimate	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	Cost to Complete	Total Cost
640007 SBIRS Low	144,723	0	0	0	0	0	0	0	1,154,120
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0
<p>(U) <u>A. Mission Description</u></p> <p>(U) The Space-Based Infrared System's (SBIRS) primary mission is to provide initial warning of a ballistic missile attack on the US, its deployed forces or its allies. SBIRS will incorporate new technologies to enhance detection; improve reporting of ICBM, SLBM and tactical ballistic missiles; and provide critical mid-course tracking and discrimination data for national and theater missile defense. This system will provide increased performance in order to meet requirements in US Space Command's Capstone Requirements Document and Operations Requirements Document. SBIRS will consist of satellites in Geosynchronous Orbits (GEO), Highly Elliptical Orbits (HEO) and Low Earth Orbits (LEO) and an integrated centralized ground station serving all SBIRS space elements and Defense Support Program (DSP) satellites. SBIRS Low is the Low Earth Orbit (LEO) component of SBIRS. PE 305911F funds DSP and PE 604441F funds SBIRS High EMD activities. Program Definition contracts for the operational SBIRS Low system were awarded in August 1999 leading to a Milestone II decision and Engineering, Manufacturing and Development (EMD) start in 1QFY03. Subsequent to the formulation of the FY00 President's Budget, the flight demonstration contracts were terminated on 5 Feb 99 and the program restructured to provide for an expanded Program Definition and Risk Reduction (PDRR) phase. The Flight Demonstration System (FDS) and Low Altitude Demonstration System (LADS) have provided valuable lessons learned and risk reduction. Results of these demonstrations will support the Program Definition efforts for operational requirements trades/allocations and system concept development. The FY00 funds for the expanded PDRR contracts were appropriated in PE 0604442F for PDRR efforts.</p> <p>(U) <u>FY 1999 (\$ in Thousands)</u></p> <p>(U) \$74,000 FDS</p> <p>(U) \$33,992 LADS</p> <p>(U) \$15,359 Program office activities.</p> <p>(U) \$1,650 Simulation / Discrimination</p> <p>(U) \$5,502 FDS and LADS Support-Range support, launch services, TMD Targets (includes termination costs)</p> <p>(U) \$9,846 Technologies</p> <p>(U) \$774 Space Study</p> <p>(U) \$3,600 Increment 3 System of Systems</p> <p>(U) \$144,723 Total</p>									
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<p>(U) <u>A. Mission Description Continued</u></p> <p>(U) <u>FY 2000 (\$ in Thousands)</u></p> <p>(U) \$0 No Activity</p> <p>(U) \$0 Total</p> <p>(U) <u>FY 2001 (\$ in Thousands)</u></p> <p>(U) \$0 No Activity</p> <p>(U) \$0 Total</p> <p>(U) <u>B. Budget Activity Justification</u></p> <p>This program is funded in Budget Activity 4, Demonstration and Validation, because it funds risk reduction and advanced technology demonstrations.</p> <p>(U) <u>C. Program Change Summary (\$ in Thousands)</u></p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;"></th> <th style="width: 10%; text-align: center;"><u>FY 1999</u></th> <th style="width: 10%; text-align: center;"><u>FY 2000</u></th> <th style="width: 10%; text-align: center;"><u>FY 2001</u></th> <th style="width: 20%; text-align: center;"><u>Total Cost</u></th> </tr> </thead> <tbody> <tr> <td>(U) Previous President's Budget (FY 2000 PBR)</td> <td style="text-align: center;">159,008</td> <td style="text-align: center;">151,378</td> <td style="text-align: center;">113,242</td> <td style="text-align: center;">1,433,025</td> </tr> <tr> <td>(U) Appropriated Value</td> <td style="text-align: center;">160,262</td> <td style="text-align: center;">0</td> <td></td> <td></td> </tr> <tr> <td>(U) Adjustments to Appropriated Value</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td> a. Congressional/General Reductions</td> <td style="text-align: center;">-1,254</td> <td></td> <td></td> <td></td> </tr> <tr> <td> b. Small Business Innovative Research</td> <td style="text-align: center;">-5,261</td> <td></td> <td></td> <td></td> </tr> <tr> <td> c. Omnibus or Other Above Threshold Reprogram</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td> d. Below Threshold Reprogram</td> <td style="text-align: center;">-8,215</td> <td></td> <td></td> <td></td> </tr> <tr> <td> e. Rescissions</td> <td style="text-align: center;">-809</td> <td></td> <td></td> <td></td> </tr> <tr> <td> f. Other</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>(U) Adjustments to Budget Years Since FY 2000 PBR</td> <td></td> <td></td> <td style="text-align: center;">-113,242</td> <td style="text-align: center;">-278,905</td> </tr> <tr> <td>(U) Current Budget Submit/FY 2001 PBR</td> <td style="text-align: center;">144,723</td> <td style="text-align: center;">0</td> <td style="text-align: center;">0</td> <td style="text-align: center;">1,154,120</td> </tr> </tbody> </table> <p>(U) <u>Significant Program Changes:</u></p> <p>Funding: The FY00 originally budgeted in this program element to complete the flight demonstration contracts are required for the expanded PDRR contracts and were appropriated in PE 0604442F. The FY01 funds were moved to PE 0604442F for the same purpose.</p>					<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>Total Cost</u>	(U) Previous President's Budget (FY 2000 PBR)	159,008	151,378	113,242	1,433,025	(U) Appropriated Value	160,262	0			(U) Adjustments to Appropriated Value					a. Congressional/General Reductions	-1,254				b. Small Business Innovative Research	-5,261				c. Omnibus or Other Above Threshold Reprogram					d. Below Threshold Reprogram	-8,215				e. Rescissions	-809				f. Other					(U) Adjustments to Budget Years Since FY 2000 PBR			-113,242	-278,905	(U) Current Budget Submit/FY 2001 PBR	144,723	0	0	1,154,120
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BUDGET ACTIVITY				PE NUMBER AND TITLE				PROJECT	
04 - Demonstration and Validation				0603441F Space Based IR Arch (Dem Val)(Space)				640007	
(U) D. Other Program Funding Summary (\$ in Thousands)									
	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>Cost to</u>	<u>Total Cost</u>
	<u>Actual</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Estimate</u>	<u>Complete</u>	
(U) PE #35922F - SBIRS Low Prod	0	0	0	0	33,100	101,400	328,390	Continuing	TBD
(U) Related RDT&E:									
(U) PE #604441F - SBIRS High EMD	508,473	420,476	569,188	389,879	196,841	128,871	100,856	356,475	3,492,030
(U) PE #305911F - DSP	13,971	7,361	11,462	6,418	6,697	0	0	0	1,923,990
(U) PE #604442F - SBIRS Low EMD	36,627	225,566	241,021	306,530	617,662	763,362	486,840	513,647	3,191,255
(U) E. Acquisition Strategy									
(U) The SBIRS program is managed through a single consolidated System Program Office (SPO) at the Space and Missile Systems Center, Los Angeles, Air Force Base, CA. SBIRS Low began Program Definition activities in Aug 99 with the award of two firm fixed price contracts. Program Definition will be followed by a competitive contract award for EMD planned in 1QFY03 with SBIRS Low satellite deployment starting in 4QFY06.									
(U) F. Schedule Profile									
		<u>FY 1999</u>			<u>FY 2000</u>			<u>FY 2001</u>	
		1	2	3	4	1	2	3	4
(U) Program Definition Contract Award					*				

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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)							DATE February 2000			
BUDGET ACTIVITY				PE NUMBER AND TITLE				PROJECT		
04 - Demonstration and Validation				0603441F Space Based IR Arch (Dem Val)(Space)				640007		
(U) <u>A. Project Cost Breakdown (\$ in Thousands)</u>										
						<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>		
(U)	Flight Demonstration System					74,000	0	0		
(U)	Low Altitude Demonstration System (LADS)					33,992	0	0		
(U)	Technologies					9,846	0	0		
(U)	Program office activities					15,359	0	0		
(U)	Simulation and Discrimination					1,650	0	0		
(U)	FDS and LADS Support					5,502	0	0		
(U)	Increment 3 System of Systems					3,600	0	0		
(U)	Space Study					774				
(U)	Total					144,723	0	0		
(U) <u>B. Budget Acquisition History and Planning Information (\$ in Thousands)</u>										
(U) <u>Performing Organizations:</u>										
	<u>Contractor or</u>	<u>Contract</u>								
	<u>Government</u>	<u>Method/Type</u>	<u>Award or</u>	<u>Performing</u>	<u>Project</u>					
	<u>Performing</u>	<u>or Funding</u>	<u>Obligation</u>	<u>Activity</u>	<u>Office</u>	<u>Total Prior</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget to</u>
	<u>Activity</u>	<u>Vehicle</u>	<u>Date</u>	<u>EAC</u>	<u>EAC</u>	<u>to FY 1999</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>Complete</u>
	<u>Product Development Organizations</u>									
	FDS - TRW	C/CPAF	May 95	TBD	686,951	611,893	74,000	0	0	0
	LADS - Boeing	SS/CPFF	Sep 96	TBD	208,136	170,744	33,992	0	0	0
	Non-Flyer Demo Work-	C/CPAF	May 95	130,643	130,643	130,643	0	0	0	0
	Rockwell International									
	Misc. Contracts	Various	Various	TBD	TBD	39,551	18,728	0	0	0
	<u>Support and Management Organizations</u>									
	Aerospace		Various	N/A	N/A	33,907	11,315	0	0	0
	SETA/SPO Support	Various	Various	N/A	N/A	22,659	5,040	0	0	0
	<u>Test and Evaluation Organizations</u>									
	NMD Targets						1,648	0	0	0
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RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)							DATE February 2000	
BUDGET ACTIVITY 04 - Demonstration and Validation				PE NUMBER AND TITLE 0603441F Space Based IR Arch (Dem Val)(Space)			PROJECT 640007	
(U) Government Furnished Property:								
	<u>Contract</u>							
<u>Item</u>	<u>Method/Type</u>	<u>Award or</u>	<u>Delivery</u>	<u>Total Prior</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget to</u>
<u>Description</u>	<u>or Funding</u>	<u>Obligation</u>	<u>Date</u>	<u>to FY 1999</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>Complete</u>
<u>Vehicle</u>	<u>Date</u>							<u>Total</u>
<u>Product Development Property</u>								<u>Program</u>
Not Applicable								
<u>Support and Management Property</u>								
<u>Test and Evaluation Property</u>								
				<u>Total Prior</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget</u>	<u>Budget to</u>
<u>Subtotals</u>				<u>to FY 1999</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>Complete</u>
Subtotal Product Development				952,831	126,720	0	0	0
Subtotal Support and Management				56,566	16,355	0	0	0
Subtotal Test and Evaluation					1,648	0	0	0
Total Project				1,009,397	144,723	0	0	0
								1,154,120

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